

REMARKS

Claims in the case are 1-3, 5, 6, 11 and 13-18, upon entry of this amendment. Claim 1 has been amended, Claims 15-18 have been added, and Claim 10 has been cancelled herein. Basis for added Claims 15-18 is found in Claim 1.

The subject matter of original Claim 10 has been inserted at page 21 of the specification, after Formula (XX) and before line 8. As the subject matter introduced at page 21 was present in Claim 10 of the application as originally filed, the amendment to the specification is not deemed to represent the entry of new matter into the case. Entry of the amendment to the specification is respectfully requested.

Included with this amendment is an appendix containing a Terminal Disclaimer relative to copending and commonly assigned United States Patent Application Serial No. 09/936,122 (Attorney Docket No. Mo-6585).

Claims 1-3, 5, 6, 10, 11 and 13-14 stand rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed in light of the amendments herein and the following remarks.

A portion of the subject matter of Claim 10 has been incorporated into Claim 1 by amendment herein such that subscripts p, x and y of polymer formulas XIV, XV, XVI and XVIII are defined. Claim 10 has been accordingly cancelled herein.

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to particularly point out and distinctly claim the subject matter which they regard as their invention. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-3, 5, 6, 10, 11 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 03 132 A1 (**Berneth et al**). This rejection is respectfully traversed with regard to the following remarks.

Berneth et al disclose photoaddressable poly(meth)acrylate polymers that are prepared from (meth)acrylate monomers having organic dye groups bonded thereto. See the abstract, page 6, and the polymer formulas of pages 9-15 of Berneth et al.

Berneth et al disclose the various monomers cited in the Office Action as being comonomers in specific copolymers represented by the formulas on pages 9-15 thereof. Berneth et al does not disclose or suggest mixing and/or matching the

monomers of the disclosed copolymers on pages 9-15. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). "Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference." *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000). Modifying "prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

In the paragraph bridging pages 2 and 3 of the present Office Action, it is not clear what portion of Applicants' specification is being parenthetically referred to. For example, on page 3 of the Office Action it is stated "similar to that of 11/8 of the instant specification." However, there is no monomer at page 11, line 8 of Applicants' specification. As such, Applicants' lack of specific counter argument with regard to these parenthetical references should not be deemed an acquiescence relative thereto.

In the first full paragraph on page 3 of the Office Action it is argued that the addition of the second monomer of Berneth et al's Formula 7 (page 13, line 30) to the polymer of Formula 8 (page 14) would result in one of the polymers of Applicants' present Claim 1. Applicants respectfully disagree. Such an addition of the second monomer of Berneth et al's Formula 7 to the polymer of Formula 8 would result in a terpolymer. The polymers of Applicants' present Claim 1 are selected from a homopolymer (i.e., the polymer of formula XIV) or copolymers (i.e., the polymers of formulas XV, XVI and XVIII).

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Berneth et al. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-3, 5, 6, 10, 11, 13 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Berneth et al in view of United States Patent No. 5,384,221 (**Savant et al**). This rejection is respectfully traversed in light of the following remarks.

Berneth et al has been discussed previously herein and discloses photoaddressable poly(meth)acrylate polymers that are prepared from monomers having organic dye groups bonded thereto. See the abstract, page 6, and the polymer formulas of pages 9-15 of Berneth et al. Berneth et al does not disclose, teach or suggest preparing a polymer having organic dye groups bonded thereto, after the polymer is formed, i.e., by covalently bonding azo groups to the backbone of an already existing polymer.

Savant et al discloses an optical storage medium that includes a transparent polymer and an isomerizable azo dye blended with or covalently bonded to a polymer backbone, after the polymer is formed. See the abstract, and column 8, lines 18-52 of Savant et al. See also Example 5 at column 22, lines 3-39 of Savant et al, wherein an azo dye is covalently bonded to the backbone of an already existing poly(ethylene vinyl alcohol) polymer by means of a condensation reaction between a carboxylic acid group on the azo dye and pendent hydroxyl groups on the poly(ethylene vinyl alcohol) polymer backbone. Savant et al does not disclose or suggest preparing a polymer having azo groups pendent from its backbone, from monomers that already have an azo group bonded thereto.

Berneth et al does not disclose, teach or suggest preparing a polymer having organic dye groups bonded thereto, after the polymer is formed, i.e., by covalently bonding azo groups to the backbone of an already existing polymer. Savant et al does not disclose, teach or suggest preparing a polymer pendent azo group, from monomers already having an azo group bonded thereto. As such, neither Berneth et al nor Savant et al provide the requisite teaching that would lead a skilled artisan to combine or otherwise modify their respective disclosures.

As the Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are: (1) the nature of the problem to be solved; (2) the teaching of the prior art; and (3) the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that neither of the patents relied

upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

Applicants wish to point out that a polymer having organic dye groups (e.g., azo groups) pendent from its backbone that is prepared from monomers having organic dye groups attached thereto, is not the same as a polymer prepared by attaching organic dye groups to the backbone of an already existing polymer. When prepared by attaching organic dyes to the backbone of an already existing polymer, the resulting polymer typically must be subjected to further processing steps (e.g., washed), which can alter the physical properties of the polymer. In addition, such post-attached organic dye functional polymers also typically contain small amounts of unreacted/free dye, which can undesirably migrate / bleed out of the polymer matrix. Polymers prepared from organic dye functional monomers do not suffer from such deficiencies, because they do not contain unreacted/free dye molecules, and as such they do not require further processing steps such as washing to remove such unreacted dyes. As such, a skilled artisan would not be motivated to modify the disclosure of Berneth et al with that of Savant et al.

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Berneth et al in view of Savant et al.

Reconsideration and withdrawal of this rejection is respectfully requested.


Claims 1-3, 5, 6, 10, 11 and 14 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 and 20-21 of copending and commonly assigned United States Patent Application Serial No. 09/936,122 (Attorney Docket No. Mo-6585), filed September 6, 2001. This rejection is respectfully traversed with regard to the following remarks and the Terminal Disclaimer included herewith.

Included in the appendix herewith is a Terminal Disclaimer relative to 09/936,122. Claims 1-21 of 09/936,122 were cancelled in an amendment dated December 5, 2003, and Claims 22 and 23 were added.

In light of the Terminal Disclaimer included herewith, the obviousness-type double patenting rejection is deemed to have been overcome. Reconsideration and withdrawal of this rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §112, and to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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APPENDIX

Terminal Disclaimer relative to copending and commonly assigned
United States Patent Application Serial No. 09/936,122
(Attorney Docket No. Mo-6585).